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AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

- 1. (Canceled)
- 2. (New) A method of heating or cooling a fluid, comprising the steps of:

feeding a fluid tangentially into a flow channel; and

subjecting the fluid in at least two stages of same length to different temperatures, as the fluid flows through the flow channel, such that the temperature increases abruptly from stage to stage in the event the fluid is to be heated, or decreases abruptly from stage to stage in the event the fluid is to be cooled.

- 3. (New) The method of claim 2, wherein the fluid enters the flow channel at a temperature of 45°C to 90 °C.
- 4. (New) Apparatus for heating or cooling a fluid, comprising:
 - a housing having an interior defining a flow channel for a fluid;
 - a feed member positioned to supply the fluid tangentially into the flow channel;

an outer jacket placed in concentric surrounding relationship to the housing, said outer jacket being subdivided into at least two sections of same length to define at least two successive stages to subject the fluid to two different temperatures as the fluid flows through the flow channel, wherein the temperature increases abruptly from section to section in the event the fluid is to be heated, or decreases abruptly from stage to stage in the event the fluid is to be cooled.

5. (New) The apparatus of claim 4, wherein each of the sections is constructed for circulation of a heat transfer medium.

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6. (New) The apparatus of claim 4, wherein each of the sections is constructed in the form of a thermoelectric battery.